**Query Checklist**

***Think like a search engine***. Use this checklist to build an optimal query

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|  | **1. How many key concepts (important ideas) are found in the question?** |
|  | **2. How many key concepts will I search for in a single query?** |
|  | **3. What keywords are probably effective “as is?”** |
|  | **4. For which concepts are more effective keywords probably needed?** |
|  | **5. Are there hyponyms or professional language for any of the intermediate words?** |
|  | **6. Are there words that have multiple meanings?** |
|  | **7. Did I use any stop words or clutter words?** |
|  | **8. Did I spell the words correctly?** |
|  | **9. Did I put the most important words first?** |

**1. How many key concepts (important ideas) are found in the question?**

After exploring the topic, define the key concepts that relate to your information need. Include special terminology, names, synonyms, and important words relating to the topic.

**For example**: If you are interested in ***mp3 players***, the two words encompass only one concept. On the other hand, if you want to know '***How many buffalo are there today in North America?***', then you have four key concepts with which to contend:

what - many (number), buffalo

where - North America

when - today

**2. How many key concepts will I search for?**

Generally, the more defined the objective, the more concepts there are. Searching for just one key concept or for more than three concepts in one query will cause problems. Trying to match all the same words used by an author becomes increasingly difficult the more words you use. You will probably be more successful searching for ***two or three concepts at a time***, even if there are other important concepts to keep in mind. It’s better to ***keep the query simple*** unless you have a good idea of the exact words an expert used. It requires keeping other important concepts in mind as you scan over the results of the search.

**3. What keywords are probably effective “as is?”**

Words that are usually good "as is" are proper nouns and numbers. When turning a question into a query, think about whether there is a proper noun that can be used in place of one of the concepts. Ineffective words tend to be verbs, adjectives and adverbs: parts of speech for which there are many options. Pronouns and prepositions tend to be "stop words" and are ignored by the search engine.

**4. For which concepts are more effective keywords probably needed?**

Effective searches require effective search words. Do not perform searches using only the first words that come to mind or those used to explain the assignment. Effective queries typically involve searching for the "right" keyword; meaning the ***word used by experts***. You may need to familiarize yourself with the topic to be sure you use the most specific search words.

**5. Are there hyponyms or professional language for any of the intermediate words?**

Prospective keywords fall along a continuum from very specific to very general. The technical terms used for them are ***hyponymns*** (very specific) and ***hypernymns*** (very general). For example, professional words might be used as hyponymns to narrow your search. Most queries can be improved by using more specific words. Replace general terms with more specific ones, though there will occasionally be a keyword that is too specific and produces few or irrelevant results  
 **6. Are there words that have multiple meanings?**

One-word searches are ineffective if they have more than one meaning. However, if your query includes ***an adequate number of keywords***--and not more than necessary--a word with multiple meanings does little to prevent you from finding what you seek. Search engines today pair words according to their context within the rest of the search string and excludes other uses of the terms. As long as the accompanying term is sufficiently unique, using a word with multiple meanings is not a problem.

**7. Did I use any stop words or clutter words?**

***Stop words*** are terms aren’t indexed in the search engine because they are common parts of speech that don't add significant meaning to the search, such as pronouns, prepositions and conjunctions. They are usually ignored by the search engine, so you have to do something different to get it to pay attention if they are important in a particular search. Words that are commonly used, like 'the,' 'a,' and 'for,' are usually ignored, but sometimes the search engine will make assumptions and include a stop word in its search if it appears to make a difference.

**For example**, for the query [ the who ] Google’s results will relate to the band whereas the query [ who ] will be interpreted as referring to the World Health Organization. How does Google “know” not to ignore the stop word 'the' in the first query? Google’s language analysis is set up to distinguish between the band and the World Health Organization. It does not ignore the stop word, because it recognizes that it is part of the title of the band. Google interprets the query [ who ] as the World Health Organization, even when you didn’t spell it out. When in doubt of how your query will be interpreted, use the operator AND between the search words or put the phrase in quotes.

***Clutter words*** are less common than stop words but don't add value to the query, either. They may even force the search engine to look for words you think are important but do not add anything special to the search and limit it unnecessarily.

**For example**, the query [ earthquake AND damage ] is unnecessarily redundant. The word “damage” will likely be included in anything written about earthquakes, so you don’t need to clutter up the query with it. Furthermore, verbs, adjectives and adverbs are often clutter terms. A good rule of thumb to keep in mind is "if you can't clearly see it, don't use the word." Stick to objects--nouns and numbers.

**8. Did I spell the words correctly?**

Some search engines have spellcheckers, so you may or may not get the results you want when you misspell a keyword, depending on which search engine you use. When words have more than one spelling or a different word happens to match the misspelling, the search engine might search for something that has no relationship with what you want.

**9. Did I put the most important words first?**  
Word order of the search terms may or may not matter to the search engine. In tests, Google returned similar results, but other search engines could vary in their results, depending on the order you enter the keywords in the search box. To be safe, try to place the most important search terms at the beginning of the query.

Adapted from an online Query Checklistpresented by *Twenty-first Century Information Fluency* <http://208.109.122.145/resources/curriculum/querychecklist.html>